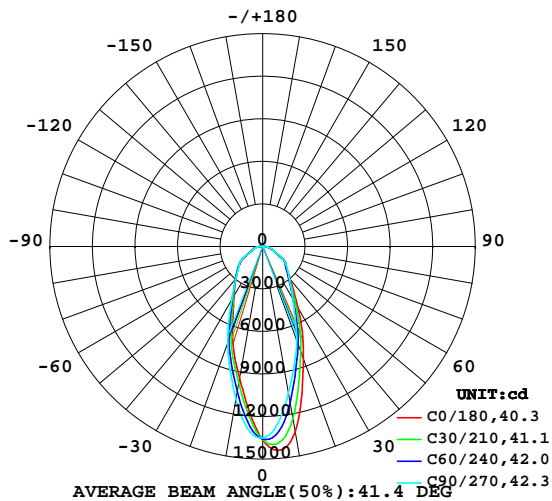


**LUMINAIRE PHOTOMETRIC TEST REPORT**

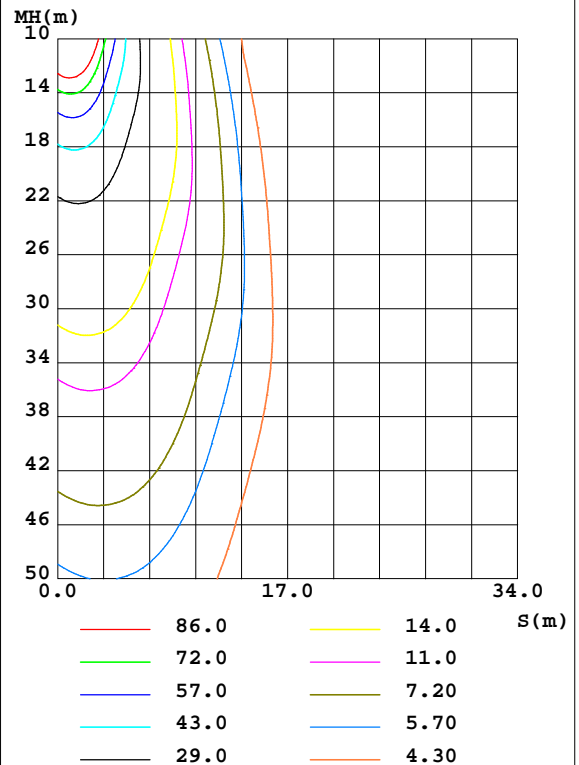
Test:U:219.9V I:0.5035A P:104.4W PF:0.9425 Lamp Flux:14407x1 lm		
NAME: HB2000-100G-C1-G5 288EA-45D_180927	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 138.03 lm/W			
HB2000-100G-C1-G5 288EA-45D_180927		Imax(cd)	14450	S/MH(C0/180)	0.56
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	0.66
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	14407	$\eta$ UP,DN(C0-180)	0.9,48.4
NOMINAL FLUX(lm)	14407	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.8,49.9
LAMPS INSIDE	1	$\eta$ up(%)	1.7	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	220	$\eta$ down(%)	98.3	CIBSE SHR MAX	0.75

**LUMINOUS INTENSITY DISTRIBUTION DIAGRAM**



**C0 PLANE ISOLUX DIAGRAM (UNIT:lx)**



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LUC  
 Test Date:03 January 2018

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1

**ZONAL FLUX DIAGRAM**

**ZONAL FLUX DIAGRAM:**

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	1325	1175	1050	957.7	944.0	1003	1094	1263	0- 10	1164	1164	8.08,8.08
20	842.5	757.8	703.0	634.4	623.7	671.3	725.3	826.2	10- 20	2511	3674	25.5,25.5
30	496.5	442.8	428.3	408.7	407.7	421.8	438.1	490.6	20- 30	2606	6280	43.6,43.6
40	304.6	285.9	293.9	293.6	295.8	298.1	294.6	306.9	30- 40	2248	8528	59.2,59.2
50	218.0	213.7	221.3	219.0	221.1	226.7	220.4	220.1	40- 50	1967	10495	72.8,72.8
60	147.8	138.3	140.4	135.5	137.8	148.5	146.2	149.9	50- 60	1690	12185	84.6,84.6
70	79.08	75.88	79.51	79.51	80.91	82.04	79.57	80.36	60- 70	1013	13198	91.6,91.6
80	40.50	39.76	46.41	50.90	54.50	52.70	45.99	43.09	70- 80	661.0	13859	96.2,96.2
90	5.275	3.919	10.60	7.138	6.646	8.586	9.741	5.761	80- 90	303.2	14162	98.3,98.3
100	2.092	2.103	2.214	2.139	1.630	1.551	1.556	1.571	90-100	29.66	14192	98.5,98.5
110	2.640	2.874	3.032	2.966	2.169	2.235	2.404	2.201	100-110	23.00	14215	98.7,98.7
120	3.400	3.621	4.005	3.815	3.060	3.024	3.281	2.923	110-120	29.40	14244	98.9,98.9
130	4.345	4.518	4.956	4.786	4.204	4.016	4.234	3.749	120-130	34.68	14279	99.1,99.1
140	5.380	5.538	5.637	5.705	5.348	5.109	5.061	4.868	130-140	37.52	14316	99.4,99.4
150	6.261	6.334	6.364	6.420	6.107	6.006	5.967	5.877	140-150	36.18	14352	99.6,99.6
160	6.664	6.706	6.705	6.639	6.416	6.413	6.463	6.442	150-160	29.51	14382	99.8,99.8
170	6.785	6.746	6.694	6.644	6.534	6.526	6.564	6.628	160-170	18.76	14401	100,100
180	6.686	6.702	6.634	6.704	6.689	6.702	6.636	6.709	170-180	6.342	14407	100,100
DEG	LUMINOUS INTENSITY:≠10cd									UNIT:lm		

**Conical surface Flux(90deg): 9541.4 lm**

**%lum = 66.2%**

**%lamp = 66.2%**

**Conical surface Flux(120deg): 12185 lm**

**%lum = 84.6%**

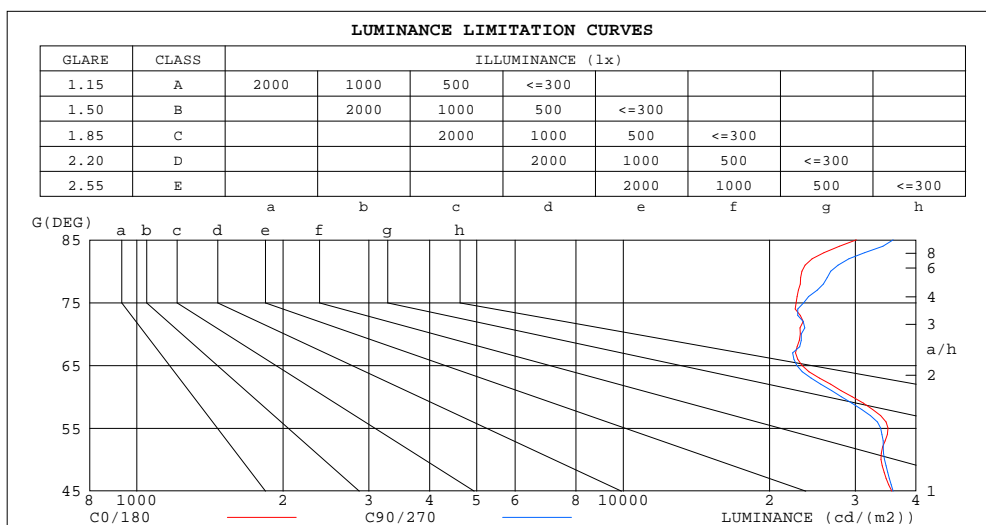
**%lamp = 84.6%**

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:03 January 2018**

**$\gamma$  Range: 0 - 180DEG**  
 **$\gamma$  Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1**

**LUMINANCE LIMITATION CURVES**

Test:U:219.9V I:0.5035A P:104.4W PF:0.9425 Lamp Flux:14407x1 lm		
NAME: HB2000-100G-C1-G5 288EA-45D_180927	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	30154	35891
80	23324	26729
75	22693	23503
70	23122	23248
65	23292	22739
60	29568	28085
55	35035	33809
50	33908	34430
45	35700	35881

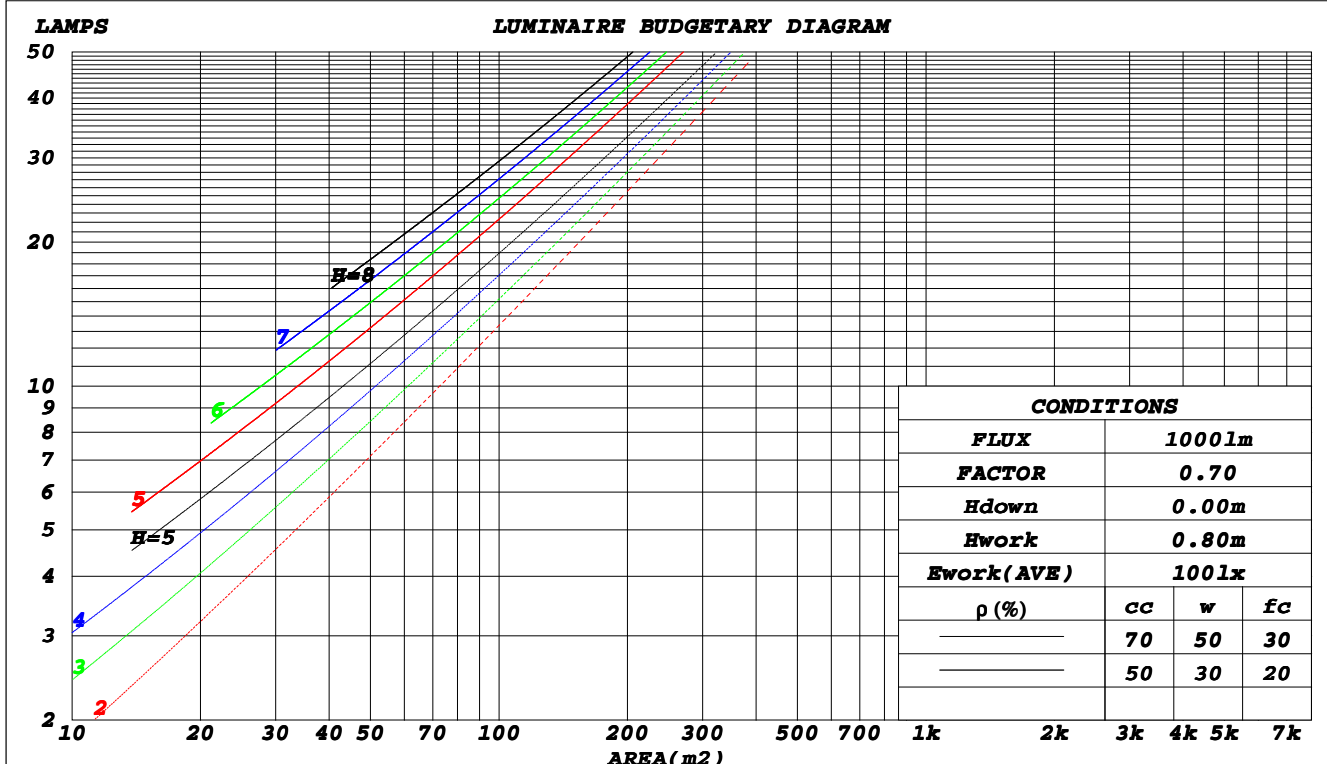
**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:03 January 2018**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1**

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:219.9V I:0.5035A P:104.4W PF:0.9425 Lamp Flux:14407x1 lm		
NAME: HB2000-100G-C1-G5 288EA-45D_180927	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	.98
1.0	1.06	1.02	.99	1.03	.90	.97	.99	.96	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.94	.89	.84	.92	.87	.82	.89	.84	.80	.85	.82	.78	.82	.79	.76	.74
3.0	.85	.78	.72	.83	.77	.72	.80	.75	.70	.77	.73	.69	.75	.71	.67	.65
4.0	.77	.70	.64	.76	.69	.63	.73	.67	.62	.71	.65	.61	.69	.64	.60	.58
5.0	.70	.63	.57	.69	.62	.57	.67	.61	.56	.65	.59	.55	.63	.58	.54	.52
6.0	.65	.57	.51	.64	.56	.51	.62	.55	.51	.60	.54	.50	.59	.53	.49	.48
7.0	.60	.52	.47	.59	.52	.47	.57	.51	.46	.56	.50	.46	.55	.49	.45	.44
8.0	.56	.48	.43	.55	.48	.43	.54	.47	.42	.52	.46	.42	.51	.46	.42	.40
9.0	.52	.45	.40	.51	.44	.40	.50	.44	.39	.49	.43	.39	.48	.43	.39	.37
10.0	.49	.42	.37	.48	.41	.37	.47	.41	.37	.46	.40	.36	.45	.40	.36	.35



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LUC  
Test Date:03 January 2018

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:8.000m [K=1.0000]  
Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1

WEC AND CCEC

Test:U:219.9V I:0.5035A P:104.4W PF:0.9425 Lamp Flux:14407x1 lm		
NAME: HB2000-100G-C1-G5 288EA-45D_180927	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0	
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
$\rho_{fc}$	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.269	.153	.048	.261	.149	.047	.247	.142	.045	.234	.135	.043	.222	.129	.042		
2.0	.250	.137	.042	.243	.134	.041	.231	.128	.040	.220	.123	.039	.209	.118	.037		
3.0	.231	.123	.037	.225	.121	.036	.215	.116	.035	.205	.112	.034	.196	.108	.034		
4.0	.214	.111	.033	.209	.109	.032	.200	.106	.032	.191	.102	.031	.183	.099	.030		
5.0	.199	.101	.029	.195	.100	.029	.186	.097	.029	.178	.094	.028	.171	.091	.027		
6.0	.186	.093	.027	.182	.092	.026	.174	.089	.026	.167	.087	.026	.161	.085	.025		
7.0	.174	.086	.024	.170	.085	.024	.163	.083	.024	.157	.081	.023	.151	.079	.023		
8.0	.163	.080	.022	.160	.079	.022	.154	.077	.022	.148	.075	.022	.143	.073	.021		
9.0	.154	.074	.021	.151	.073	.021	.145	.072	.020	.140	.070	.020	.135	.069	.020		
10.0	.145	.070	.019	.143	.069	.019	.138	.067	.019	.133	.066	.019	.129	.065	.019		

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.203	.203	.203	.174	.174	.174	.119	.119	.119	.068	.068	.068	.022	.022	.022	
1.0	.191	.170	.151	.163	.146	.130	.112	.100	.090	.064	.058	.052	.021	.019	.017	
2.0	.180	.145	.116	.154	.125	.101	.106	.087	.070	.061	.050	.041	.020	.016	.013	
3.0	.170	.127	.093	.146	.110	.081	.100	.076	.057	.058	.045	.033	.019	.014	.011	
4.0	.161	.113	.077	.139	.098	.067	.095	.068	.047	.055	.040	.028	.018	.013	.009	
5.0	.153	.103	.065	.132	.089	.057	.091	.062	.040	.053	.036	.024	.017	.012	.008	
6.0	.146	.094	.057	.126	.081	.049	.087	.057	.035	.050	.034	.021	.016	.011	.007	
7.0	.139	.087	.050	.120	.075	.044	.083	.053	.031	.048	.031	.018	.016	.010	.006	
8.0	.133	.081	.045	.115	.070	.039	.079	.049	.028	.046	.029	.017	.015	.010	.005	
9.0	.127	.076	.041	.110	.066	.036	.076	.046	.025	.044	.027	.015	.014	.009	.005	
10.0	.122	.071	.038	.105	.062	.033	.073	.044	.023	.043	.026	.014	.014	.008	.005	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LUC  
Test Date:03 January 2018

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:8.000m [K=1.0000]  
Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1

**UGR(Unified Glare Rating) Table**

Test:U:219.9V I:0.5035A P:104.4W PF:0.9425 Lamp Flux:14407x1 lm		
NAME: HB2000-100G-C1-G5 288EA-45D_180927	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

<b>ceiling/cavity</b>	<b>0.7</b>	<b>0.7</b>	<b>0.5</b>	<b>0.5</b>	<b>0.3</b>	<b>0.7</b>	<b>0.7</b>	<b>0.5</b>	<b>0.5</b>	<b>0.3</b>
<b>walls</b>	<b>0.5</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>	<b>0.3</b>
<b>working plane</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>
<b>Room dimensions</b>	<b>Viewed crosswise</b>					<b>Viewed endwise</b>				
<b>x = 2H y = 2H</b>	<b>23.7</b>	<b>25.0</b>	<b>24.0</b>	<b>25.2</b>	<b>25.4</b>	<b>23.4</b>	<b>24.7</b>	<b>23.7</b>	<b>24.9</b>	<b>25.2</b>
<b>3H</b>	<b>24.7</b>	<b>25.9</b>	<b>25.0</b>	<b>26.1</b>	<b>26.4</b>	<b>24.5</b>	<b>25.6</b>	<b>24.8</b>	<b>25.9</b>	<b>26.2</b>
<b>4H</b>	<b>25.2</b>	<b>26.3</b>	<b>25.5</b>	<b>26.6</b>	<b>26.9</b>	<b>25.0</b>	<b>26.1</b>	<b>25.3</b>	<b>26.4</b>	<b>26.7</b>
<b>6H</b>	<b>25.6</b>	<b>26.7</b>	<b>26.0</b>	<b>27.0</b>	<b>27.3</b>	<b>25.6</b>	<b>26.7</b>	<b>25.9</b>	<b>27.0</b>	<b>27.3</b>
<b>8H</b>	<b>25.8</b>	<b>26.9</b>	<b>26.2</b>	<b>27.2</b>	<b>27.5</b>	<b>25.9</b>	<b>26.9</b>	<b>26.3</b>	<b>27.2</b>	<b>27.5</b>
<b>12H</b>	<b>26.1</b>	<b>27.1</b>	<b>26.4</b>	<b>27.4</b>	<b>27.7</b>	<b>26.2</b>	<b>27.2</b>	<b>26.6</b>	<b>27.5</b>	<b>27.9</b>
<b>4H 2H</b>	<b>24.0</b>	<b>25.2</b>	<b>24.4</b>	<b>25.4</b>	<b>25.7</b>	<b>23.8</b>	<b>24.9</b>	<b>24.2</b>	<b>25.2</b>	<b>25.5</b>
<b>3H</b>	<b>25.2</b>	<b>26.2</b>	<b>25.6</b>	<b>26.5</b>	<b>26.9</b>	<b>25.1</b>	<b>26.1</b>	<b>25.4</b>	<b>26.4</b>	<b>26.7</b>
<b>4H</b>	<b>25.9</b>	<b>26.8</b>	<b>26.3</b>	<b>27.1</b>	<b>27.5</b>	<b>25.8</b>	<b>26.7</b>	<b>26.2</b>	<b>27.0</b>	<b>27.4</b>
<b>6H</b>	<b>26.5</b>	<b>27.3</b>	<b>26.9</b>	<b>27.7</b>	<b>28.1</b>	<b>26.5</b>	<b>27.3</b>	<b>26.9</b>	<b>27.7</b>	<b>28.1</b>
<b>8H</b>	<b>26.8</b>	<b>27.6</b>	<b>27.2</b>	<b>27.9</b>	<b>28.4</b>	<b>26.9</b>	<b>27.7</b>	<b>27.4</b>	<b>28.1</b>	<b>28.5</b>
<b>12H</b>	<b>27.1</b>	<b>27.8</b>	<b>27.6</b>	<b>28.2</b>	<b>28.7</b>	<b>27.4</b>	<b>28.0</b>	<b>27.8</b>	<b>28.5</b>	<b>28.9</b>
<b>8H 4H</b>	<b>26.1</b>	<b>26.9</b>	<b>26.6</b>	<b>27.3</b>	<b>27.7</b>	<b>26.0</b>	<b>26.8</b>	<b>26.4</b>	<b>27.1</b>	<b>27.6</b>
<b>6H</b>	<b>26.9</b>	<b>27.5</b>	<b>27.4</b>	<b>28.0</b>	<b>28.4</b>	<b>27.0</b>	<b>27.6</b>	<b>27.4</b>	<b>28.0</b>	<b>28.5</b>
<b>8H</b>	<b>27.3</b>	<b>27.9</b>	<b>27.8</b>	<b>28.3</b>	<b>28.8</b>	<b>27.5</b>	<b>28.0</b>	<b>28.0</b>	<b>28.5</b>	<b>29.0</b>
<b>12H</b>	<b>27.8</b>	<b>28.3</b>	<b>28.3</b>	<b>28.8</b>	<b>29.3</b>	<b>28.1</b>	<b>28.6</b>	<b>28.6</b>	<b>29.0</b>	<b>29.6</b>
<b>12H 4H</b>	<b>26.1</b>	<b>26.8</b>	<b>26.6</b>	<b>27.2</b>	<b>27.7</b>	<b>26.0</b>	<b>26.7</b>	<b>26.5</b>	<b>27.1</b>	<b>27.6</b>
<b>6H</b>	<b>27.0</b>	<b>27.6</b>	<b>27.5</b>	<b>28.0</b>	<b>28.5</b>	<b>27.0</b>	<b>27.6</b>	<b>27.5</b>	<b>28.0</b>	<b>28.5</b>
<b>8H</b>	<b>27.5</b>	<b>28.0</b>	<b>28.0</b>	<b>28.5</b>	<b>29.0</b>	<b>27.7</b>	<b>28.1</b>	<b>28.2</b>	<b>28.6</b>	<b>29.1</b>
<b>Variations with the observer position at spacings:</b>										
<b>S = 1.0H</b>	<b>+ 0.1 / - 0.2</b>					<b>+ 0.1 / - 0.2</b>				
<b>1.5H</b>	<b>+ 0.4 / - 0.3</b>					<b>+ 0.4 / - 0.4</b>				
<b>2.0H</b>	<b>+ 0.4 / - 0.6</b>					<b>+ 0.4 / - 0.5</b>				

CIE Pub.117 Corrected 14407 lm Total Lamp Luminous Flux.(8log(F/F0) = 9.3)

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:03 January 2018**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1**

**UTILIZATION FACTORS TABLE**

Test:U:219.9V I:0.5035A P:104.4W PF:0.9425 Lamp Flux:14407x1 lm		
NAME: HB2000-100G-C1-G5 288EA-45D_180927	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

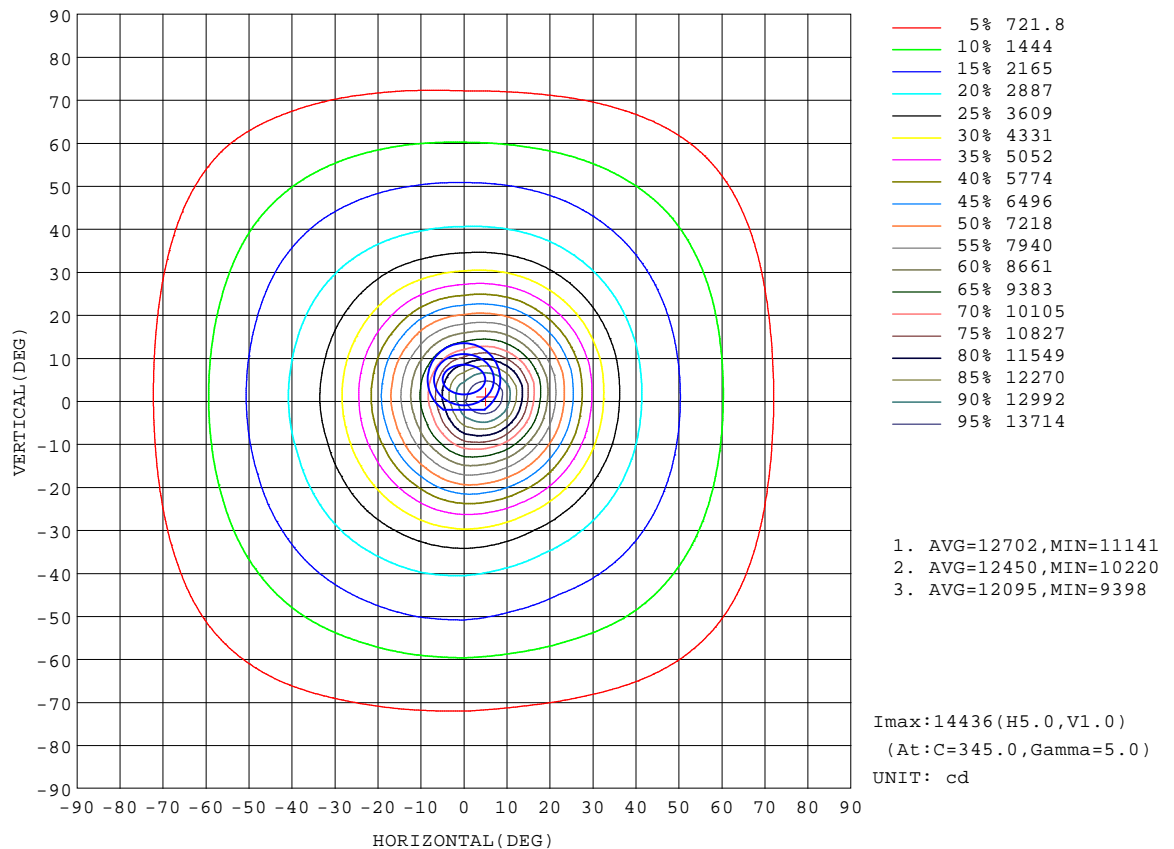
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	66	56	50	65	56	50	64	55	50	44
0.80	76	66	59	75	65	59	73	64	59	53
1.00	83	73	67	82	73	67	79	74	66	60
1.25	89	80	74	88	79	74	85	78	73	66
1.50	93	85	79	92	84	79	89	82	77	70
2.00	99	91	86	97	90	85	93	88	84	76
2.50	102	95	90	100	94	89	96	91	87	79
3.00	105	99	94	102	97	93	98	94	90	82
4.00	108	103	99	105	101	97	101	98	95	86
5.00	110	106	102	107	104	100	103	100	97	88
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:03 January 2018**

**$\gamma$  Range: 0 - 180DEG**  
 **$\gamma$  Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1**

**ISOCANDELA DIAGRAM**

Test:U:219.9V I:0.5035A P:104.4W PF:0.9425 Lamp Flux:14407x1 lm		
NAME: HB2000-100G-C1-G5 288EA-45D_180927	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:03 January 2018**

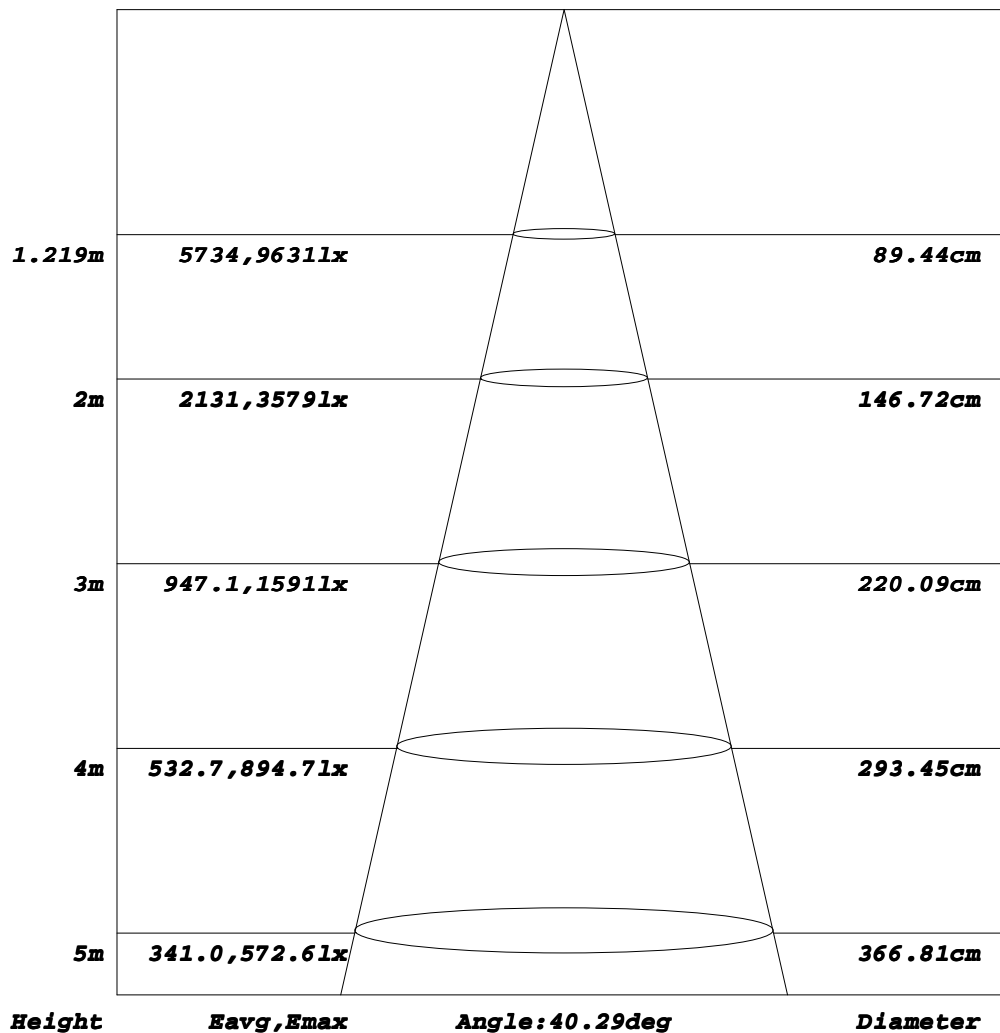
**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1**



**AAI Figure**

Test:U:219.9V I:0.5035A P:104.4W PF:0.9425 Lamp Flux:14407x1 lm		
NAME: HB2000-100G-C1-G5 288EA-45D_180927	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

**Flux out:3946 lm**



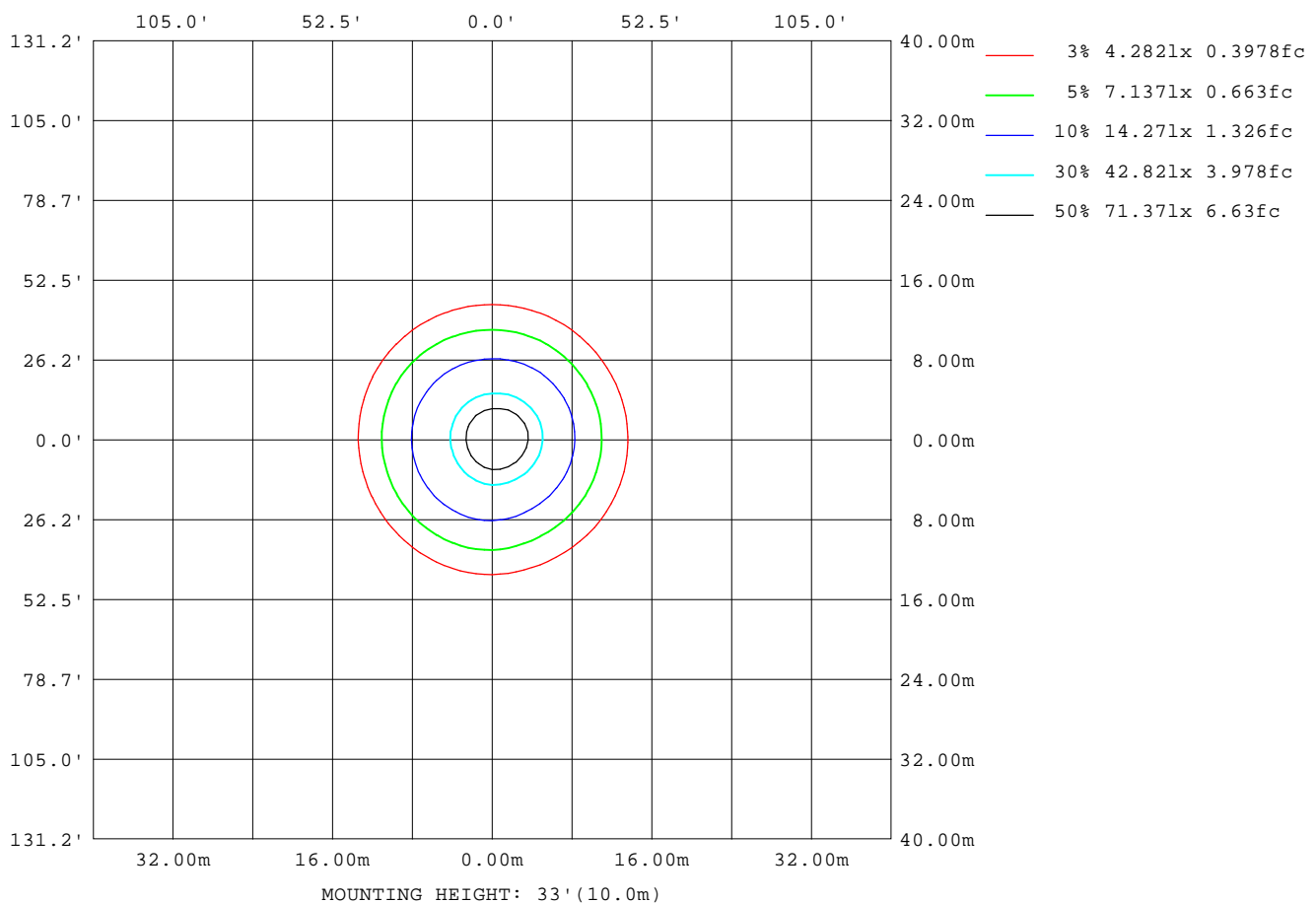
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: LUC**  
**Test Date: 03 January 2018**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1**

**ISOLUX DIAGRAM**

Test:U:219.9V I:0.5035A P:104.4W PF:0.9425 Lamp Flux:14407x1 lm		
NAME: HB2000-100G-C1-G5 288EA-45D_180927	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: LUC**  
**Test Date: 03 January 2018**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1**

**LED Avg.L Report**

Test:U:219.9V I:0.5035A P:104.4W PF:0.9425 Lamp Flux:14407x1 lm		
NAME: HB2000-100G-C1-G5 288EA-45D_180927	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

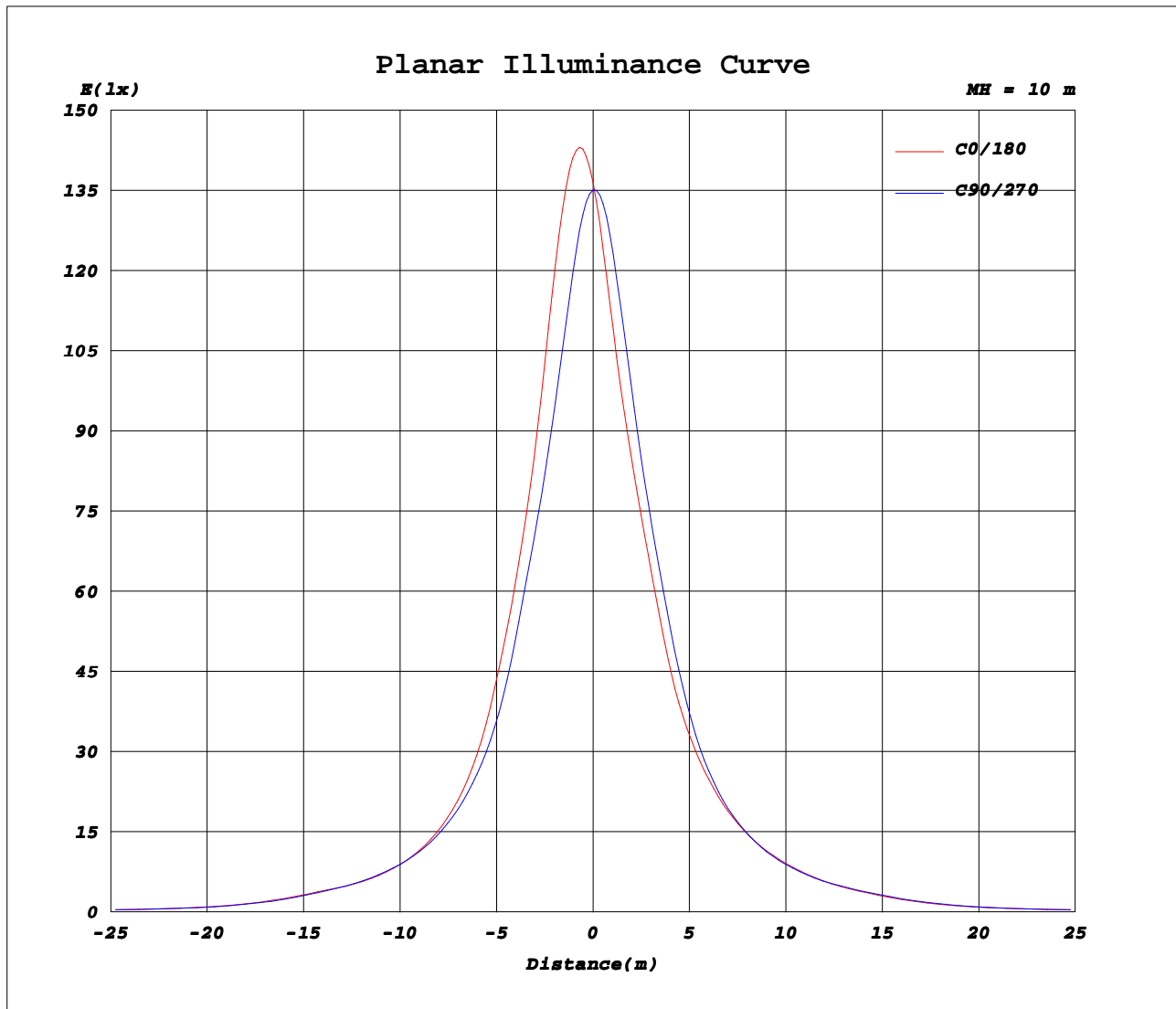
AvgL	cd/m2
L_0~180(65)av	22879
L_0~180(75)av	23923
L_0~180(85)av	33844
L_90~270(65)av	22938
L_90~270(75)av	23771
L_90~270(85)av	35879
L_45(65)av	22888
L_45(75)av	23592
L_45(85)av	33750

Standard: GB/T 29293-2012

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:03 January 2018**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1**

**Planar Illuminance Curve**



**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: LUC**  
**Test Date: 03 January 2018**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1**

**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:219.9V I:0.5035A P:104.4W PF:0.9425 Lamp Flux:14407x1 lm		
NAME: HB2000-100G-C1-G5 288EA-45D_180927	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--1

UNIT: #10cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	1364	1361	1362	1360	1359	1356	1351	1350	1349	1352	1351	1356	1364	1361	1362	1360	1359	1356	1351
5	1441	1419	1385	1350	1311	1277	1251	1217	1184	1163	1145	1141	1153	1162	1185	1208	1239	1267	1283
10	1325	1288	1232	1175	1118	1076	1050	1014	979	958	939	936	944	956	977	1003	1038	1071	1094
15	1073	1038	987	944	904	877	863	837	811	793	778	773	782	791	812	829	856	878	895
20	842	819	786	758	731	713	703	680	652	634	619	615	624	633	653	671	697	714	725
25	662	645	615	589	562	548	541	529	511	498	489	490	493	501	510	522	541	555	565
30	497	481	462	443	429	427	428	423	415	409	403	402	408	411	415	422	429	432	438
35	382	373	360	349	343	346	351	349	345	342	339	338	344	345	348	350	353	351	353
40	305	300	292	286	282	287	294	296	294	294	292	291	296	296	299	298	297	294	295
45	252	250	246	242	240	246	254	256	256	255	254	254	258	259	261	260	257	254	252
50	218	217	215	214	212	215	221	222	220	219	218	218	221	223	226	227	225	222	220
55	201	200	197	194	190	190	194	194	190	187	186	187	190	192	196	197	197	197	196
60	148	145	141	138	134	136	140	140	136	136	134	134	138	140	146	149	150	150	146
65	98.4	97.0	94.9	93.9	92.6	93.3	96.1	95.8	94.6	93.8	92.6	93.0	94.9	96.5	98.7	99.7	101	100	97.8
70	79.1	78.5	76.1	75.9	75.3	76.8	79.5	80.8	80.2	79.5	78.6	78.8	80.9	81.9	82.3	82.0	82.2	81.4	79.6
75	58.7	57.3	56.8	56.4	56.8	57.6	60.8	61.5	62.6	62.6	62.8	63.3	65.1	65.2	65.6	64.8	64.7	64.1	62.2
80	40.5	39.7	39.3	39.8	40.6	42.6	46.4	48.6	49.6	50.9	51.0	51.6	54.5	54.1	54.2	52.7	51.5	49.5	46.0
85	26.3	25.6	25.0	25.8	27.0	27.7	31.3	32.0	31.0	30.8	29.8	29.3	32.7	34.0	35.2	32.5	28.3	29.8	31.3
90	5.27	5.07	3.74	3.92	5.65	8.94	10.6	10.5	9.00	7.14	5.04	5.11	6.65	7.51	8.67	8.59	9.70	10.2	9.74
95	2.10	2.07	2.03	2.11	2.65	3.40	4.18	3.85	3.10	2.11	2.04	2.14	1.71	1.68	1.51	1.43	1.53	1.79	1.68
100	2.09	2.09	2.09	2.10	2.14	2.15	2.21	2.19	2.16	2.14	2.16	2.17	1.63	1.60	1.57	1.55	1.54	1.54	1.56
105	2.33	2.36	2.44	2.45	2.45	2.52	2.50	2.47	2.46	2.52	2.57	2.50	1.87	1.88	1.90	1.81	1.80	1.85	1.92
110	2.64	2.66	2.74	2.87	2.99	3.03	3.03	3.02	3.03	2.97	2.88	2.85	2.17	2.13	2.15	2.23	2.26	2.31	2.40
115	3.00	3.02	3.07	3.25	3.42	3.55	3.52	3.55	3.50	3.39	3.27	3.27	2.57	2.53	2.50	2.60	2.71	2.80	2.86
120	3.40	3.43	3.43	3.62	3.82	3.99	4.00	4.00	3.93	3.82	3.73	3.77	3.06	3.01	2.91	3.02	3.14	3.23	3.28
125	3.85	3.88	3.91	4.05	4.36	4.51	4.51	4.55	4.45	4.30	4.29	4.32	3.62	3.56	3.45	3.50	3.66	3.73	3.76
130	4.35	4.38	4.41	4.52	4.75	4.93	4.96	5.01	4.92	4.79	4.84	4.87	4.20	4.16	4.03	4.02	4.15	4.24	4.23
135	4.87	4.92	5.02	5.03	5.12	5.29	5.32	5.35	5.27	5.28	5.38	5.39	4.79	4.75	4.66	4.58	4.55	4.66	4.66
140	5.38	5.46	5.52	5.54	5.57	5.65	5.64	5.67	5.71	5.70	5.84	5.85	5.35	5.30	5.20	5.11	5.05	5.06	5.06
145	5.90	5.96	5.96	5.97	6.01	6.02	6.01	6.03	6.08	6.12	6.15	6.18	5.79	5.75	5.66	5.58	5.55	5.52	5.53
150	6.26	6.28	6.30	6.33	6.38	6.38	6.36	6.37	6.40	6.42	6.39	6.41	6.11	6.07	6.01	6.01	5.97	5.95	5.97
155	6.50	6.52	6.53	6.55	6.61	6.62	6.60	6.60	6.58	6.55	6.55	6.54	6.29	6.26	6.25	6.24	6.28	6.28	6.28
160	6.66	6.68	6.69	6.71	6.71	6.73	6.70	6.70	6.66	6.64	6.63	6.62	6.42	6.41	6.40	6.41	6.44	6.46	6.46
165	6.79	6.78	6.77	6.77	6.77	6.76	6.73	6.72	6.68	6.67	6.66	6.65	6.50	6.49	6.49	6.50	6.51	6.54	6.56
170	6.78	6.77	6.75	6.75	6.75	6.73	6.69	6.67	6.64	6.64	6.65	6.64	6.53	6.54	6.54	6.53	6.54	6.55	6.56
175	6.72	6.71	6.70	6.73	6.72	6.68	6.64	6.63	6.62	6.65	6.66	6.63	6.57	6.58	6.61	6.60	6.59	6.59	6.59
180	6.69	6.68	6.68	6.70	6.68	6.65	6.63	6.65	6.67	6.70	6.70	6.68	6.69	6.67	6.68	6.70	6.68	6.65	6.64

**C Range: 0 - 360DEG**
**C Interval: 15.0DEG**
**Test Speed: HIGH**
**Temperature:25.3DEG**
**Operators:LUC**
**Test Date:03 January 2018**
**γ Range: 0 - 180DEG**
**γ Interval: 1.0DEG**
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**
**Humidity:65.0%**
**Test Distance:8.000m [K=1.0000]**
**Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1**

**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:219.9V I:0.5035A P:104.4W PF:0.9425 Lamp Flux:14407x1 lm		
NAME: HB2000-100G-C1-G5 288EA-45D_180927	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--2

UNIT: #10cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	1350	1349	1352	1351	1356														
5	1318	1359	1397	1430	1445														
10	1143	1205	1263	1316	1345														
15	932	984	1032	1080	1102														
20	756	796	826	853	865														
25	592	624	648	671	680														
30	455	474	491	506	512														
35	364	374	381	388	391														
40	299	305	307	310	310														
45	254	255	255	256	256														
50	221	221	220	220	219														
55	197	199	199	200	201														
60	146	148	150	153	154														
65	97.1	98.7	99.5	101	101														
70	80.3	81.4	80.4	80.3	80.0														
75	61.4	60.9	60.3	60.4	59.7														
80	44.4	44.0	43.1	42.0	41.4														
85	29.9	29.7	28.4	27.0	26.5														
90	8.71	7.58	5.76	6.58	6.25														
95	1.49	1.43	1.41	1.49	1.64														
100	1.56	1.56	1.57	1.59	1.60														
105	1.90	1.83	1.88	1.86	1.80														
110	2.35	2.29	2.20	2.11	2.05														
115	2.83	2.68	2.53	2.37	2.35														
120	3.21	3.05	2.92	2.71	2.73														
125	3.70	3.51	3.30	3.16	3.16														
130	4.18	3.95	3.75	3.64	3.67														
135	4.58	4.39	4.30	4.29	4.23														
140	5.00	4.91	4.87	4.87	4.83														
145	5.48	5.41	5.41	5.39	5.43														
150	5.92	5.91	5.88	5.83	5.87														
155	6.27	6.23	6.20	6.18	6.20														
160	6.47	6.44	6.44	6.43	6.44														
165	6.58	6.57	6.58	6.59	6.61														
170	6.61	6.62	6.63	6.64	6.67														
175	6.62	6.66	6.67	6.66	6.67														
180	6.64	6.67	6.71	6.69	6.68														

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:03 January 2018**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1**

**Photometric Data Table [cd]**

G/C	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0	135.0
0.0	13644	13614	13624	13598	13587	13556	13510	13502	13492	13518
3.0	14335	14184	13983	13751	13501	13278	13103	12886	12642	12492
6.0	14342	14074	13677	13269	12811	12411	12132	11774	11426	11203
9.0	13633	13279	12745	12204	11619	11196	10920	10547	10179	9946
12.0	12312	11925	11346	10812	10274	9906	9702	9388	9073	8882
15.0	10727	10383	9872	9442	9037	8770	8633	8370	8105	7927
18.0	9252	8982	8597	8276	7971	7769	7670	7442	7174	6990
21.0	8045	7821	7509	7247	6989	6799	6691	6478	6208	6034
24.0	6967	6790	6496	6226	5956	5792	5711	5564	5353	5207
27.0	5920	5749	5481	5244	5021	4917	4895	4814	4693	4582
30.0	4965	4814	4620	4428	4287	4272	4283	4232	4151	4087
33.0	4211	4102	3960	3817	3736	3755	3786	3758	3701	3667
36.0	3638	3561	3445	3346	3290	3328	3377	3371	3331	3314
39.0	3179	3126	3038	2974	2927	2976	3038	3054	3026	3023
42.0	2814	2773	2716	2664	2632	2685	2762	2788	2775	2773
45.0	2524	2496	2459	2425	2403	2457	2537	2565	2556	2552
48.0	2301	2284	2260	2238	2220	2267	2341	2362	2348	2340
51.0	2136	2129	2116	2100	2086	2114	2158	2161	2135	2122
54.0	2054	2045	2024	2001	1966	1965	2002	2000	1969	1943
57.0	1842	1828	1777	1740	1695	1703	1756	1747	1699	1680
60.0	1478	1450	1405	1383	1341	1356	1404	1398	1364	1355
63.0	1151	1121	1091	1071	1049	1062	1105	1101	1085	1075
66.0	929.6	917.8	886.1	882.3	870.2	879.9	912.1	913.8	904.3	896.5
69.0	825.0	824.9	801.2	795.4	804.0	832.8	843.7	843.7	837.9	830.1
72.0	724.2	709.7	700.2	689.8	683.7	693.7	725.1	731.6	722.3	721.0
75.0	587.3	572.9	568.3	564.2	567.5	576.4	608.3	615.3	625.9	626.5
78.0	480.6	470.3	462.8	471.4	476.6	501.3	536.2	564.8	574.9	594.6
81.0	370.4	366.7	364.0	370.8	380.7	400.8	432.8	453.9	462.6	474.9
84.0	290.8	288.3	290.7	307.2	316.5	327.7	357.2	364.5	367.9	369.6
87.0	169.7	168.3	157.5	155.1	153.2	178.0	208.3	208.7	196.5	193.7
90.0	52.75	50.75	37.40	39.19	56.48	89.36	106.0	104.6	90.03	71.38
93.0	19.47	19.20	18.70	22.96	34.04	50.37	60.43	53.34	38.55	22.61
96.0	21.14	21.10	20.23	20.76	22.96	26.82	31.86	29.86	26.17	20.65
99.0	20.96	21.13	20.56	20.64	21.10	22.07	23.97	23.27	21.78	20.94
102.0	21.69	21.93	22.38	22.13	22.28	22.46	22.33	22.44	22.40	22.64
105.0	23.30	23.58	24.42	24.54	24.49	25.19	24.98	24.73	24.60	25.20
108.0	25.10	25.30	26.15	27.20	27.74	28.18	28.12	27.98	27.77	27.91
111.0	27.08	27.28	28.08	29.39	30.98	31.56	31.34	31.28	31.55	30.45
114.0	29.19	29.45	30.00	31.61	33.43	34.42	34.19	34.45	34.18	32.90
117.0	31.52	31.80	32.17	34.18	35.82	37.23	37.37	37.36	36.64	35.80
120.0	34.00	34.29	34.34	36.21	38.19	39.89	40.05	40.02	39.33	38.15
123.0	36.65	37.04	37.18	38.60	41.21	42.94	42.92	42.92	42.24	41.10
126.0	39.29	39.76	40.05	41.43	44.35	46.09	46.16	46.73	45.67	44.08
129.0	42.36	42.72	42.87	44.22	46.79	48.61	48.79	49.29	48.35	46.93
132.0	45.45	45.91	46.37	47.40	48.94	50.71	51.14	51.51	50.57	49.76
135.0	48.67	49.22	50.16	50.31	51.16	52.93	53.23	53.54	52.69	52.80
138.0	51.85	52.45	53.24	53.41	53.96	54.83	55.07	55.11	55.29	55.49
141.0	54.86	55.87	56.12	56.42	56.51	57.31	57.15	57.54	57.87	57.90
144.0	58.12	58.78	58.80	58.83	59.17	59.52	59.41	59.70	60.13	60.35
147.0	60.56	60.93	61.03	61.26	61.71	61.70	61.62	61.83	62.19	62.66
150.0	62.61	62.77	63.02	63.34	63.78	63.80	63.64	63.65	64.02	64.20
153.0	64.13	64.42	64.48	64.79	65.45	65.32	65.29	65.23	65.17	65.13
156.0	65.38	65.61	65.64	65.79	66.34	66.56	66.20	66.23	66.09	65.69
159.0	66.31	66.45	66.66	66.84	66.99	67.12	66.98	66.90	66.50	66.25
162.0	67.16	67.27	67.30	67.40	67.51	67.36	67.19	67.04	66.69	66.54
165.0	67.86	67.85	67.72	67.69	67.68	67.63	67.33	67.20	66.80	66.66
168.0	67.99	67.92	67.68	67.55	67.68	67.54	67.11	66.90	66.64	66.49
171.0	67.69	67.55	67.30	67.40	67.52	67.13	66.83	66.55	66.39	66.46
174.0	67.23	67.14	67.09	67.28	67.25	66.86	66.53	66.40	66.23	66.42
177.0	67.05	66.96	66.92	67.20	67.11	66.70	66.46	66.27	66.46	66.77
180.0	66.86	66.75	66.81	67.02	66.79	66.51	66.34	66.46	66.74	67.04
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	13515	13559	13644	13614	13624	13598	13587	13556	13510	13502
3.0	12342	12325	12447	12511	12693	12854	13064	13224	13307	13516
6.0	10999	10960	11081	11182	11435	11676	12010	12306	12504	12919
9.0	9760	9715	9807	9925	10156	10435	10800	11124	11348	11830
12.0	8703	8673	8759	8865	9071	9300	9594	9869	10098	10570
15.0	7779	7731	7824	7914	8115	8292	8560	8784	8950	9320
18.0	6834	6786	6879	6976	7177	7358	7614	7788	7911	8242
21.0	5885	5859	5931	6026	6215	6386	6645	6813	6922	7235
24.0	5104	5106	5138	5233	5350	5491	5698	5853	5950	6241
27.0	4517	4513	4554	4619	4682	4767	4896	4988	5085	5326
30.0	4029	4016	4077	4108	4154	4218	4288	4315	4381	4551

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: LUC**  
**Test Date: 03 January 2018**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1**

**Photometric Data Table [cd]**

33.0	3617	3609	3671	3685	3722	3763	3805	3796	3831	3966
36.0	3280	3272	3328	3341	3367	3384	3404	3381	3395	3488
39.0	2998	2995	3042	3052	3071	3072	3070	3041	3048	3103
42.0	2762	2757	2796	2807	2821	2817	2792	2764	2757	2792
45.0	2543	2541	2576	2588	2607	2598	2567	2538	2523	2539
48.0	2327	2328	2363	2377	2405	2399	2373	2344	2326	2331
51.0	2107	2109	2140	2159	2195	2201	2186	2169	2155	2160
54.0	1921	1930	1967	1988	2026	2034	2032	2027	2018	2026
57.0	1662	1665	1703	1734	1789	1813	1824	1821	1796	1814
60.0	1339	1344	1378	1404	1460	1485	1501	1496	1462	1464
63.0	1061	1064	1096	1116	1152	1171	1183	1180	1146	1140
66.0	885.0	886.7	909.1	912.8	930.9	937.2	945.2	943.4	927.3	923.6
69.0	822.7	821.4	836.9	843.0	857.5	848.5	843.7	836.2	831.3	836.2
72.0	708.2	707.7	732.1	748.8	762.5	755.7	748.1	747.0	726.6	730.8
75.0	628.1	632.9	651.0	652.1	656.3	648.5	647.2	641.3	622.2	614.4
78.0	591.1	595.4	622.3	620.1	613.4	599.4	582.8	566.0	539.5	522.9
81.0	474.7	476.1	502.7	502.0	500.6	480.8	461.9	449.1	419.7	407.4
84.0	366.1	361.5	391.9	386.4	389.4	361.6	314.9	328.9	340.2	324.9
87.0	178.0	174.3	191.3	205.6	225.3	207.7	220.3	209.3	212.3	201.1
90.0	50.39	51.10	66.46	75.14	86.75	85.86	96.98	101.8	97.41	87.14
93.0	19.31	20.09	16.01	15.38	14.02	15.23	31.02	51.54	48.88	38.33
96.0	20.53	22.15	16.89	17.18	15.71	14.43	14.64	14.37	14.13	14.09
99.0	21.19	21.34	16.42	16.27	15.43	15.15	14.97	14.98	15.10	15.11
102.0	23.03	23.33	17.15	17.32	17.12	16.37	16.33	16.40	16.80	16.68
105.0	25.70	25.03	18.66	18.83	18.96	18.12	17.96	18.45	19.18	18.97
108.0	27.53	26.92	20.27	20.08	20.34	20.71	20.39	21.18	21.96	21.80
111.0	29.58	29.31	22.45	22.08	22.17	23.07	23.70	24.25	24.99	24.57
114.0	31.89	31.81	24.85	24.43	24.33	25.17	26.45	27.07	27.68	27.40
117.0	34.47	34.66	27.60	27.09	26.65	27.76	28.63	29.62	30.25	29.61
120.0	37.27	37.72	30.60	30.10	29.12	30.24	31.41	32.28	32.81	32.05
123.0	40.68	40.97	33.88	33.29	32.29	32.87	34.01	35.07	35.48	34.65
126.0	44.04	44.36	37.37	36.74	35.55	36.03	37.86	38.46	38.70	38.14
129.0	47.25	47.61	40.88	40.40	39.12	39.15	40.71	41.51	41.51	40.94
132.0	50.66	50.87	44.40	44.01	42.84	42.37	43.19	44.07	44.12	43.27
135.0	53.77	53.87	47.87	47.50	46.62	45.84	45.53	46.56	46.63	45.77
138.0	56.80	56.68	51.14	50.76	50.06	49.05	48.51	48.66	48.83	47.96
141.0	59.01	59.29	54.50	54.07	53.06	52.01	51.54	51.54	51.61	51.05
144.0	60.92	61.23	57.09	56.77	55.73	54.83	54.50	54.35	54.44	53.87
147.0	62.77	62.84	59.32	58.91	58.22	57.82	57.29	56.96	57.21	56.74
150.0	63.93	64.10	61.07	60.73	60.12	60.06	59.74	59.49	59.67	59.25
153.0	65.00	64.97	62.30	62.03	61.60	61.64	61.73	61.66	61.78	61.55
156.0	65.65	65.56	63.14	62.87	62.81	62.83	63.16	63.23	63.22	63.30
159.0	66.20	66.10	63.91	63.84	63.72	63.77	64.13	64.31	64.39	64.42
162.0	66.51	66.33	64.50	64.37	64.43	64.55	64.63	64.97	65.07	65.04
165.0	66.64	66.51	64.99	64.94	64.92	65.00	65.13	65.45	65.57	65.76
168.0	66.62	66.58	65.25	65.28	65.23	65.22	65.28	65.49	65.62	66.06
171.0	66.45	66.36	65.28	65.40	65.43	65.38	65.40	65.54	65.56	65.95
174.0	66.50	66.20	65.50	65.62	65.85	65.81	65.77	65.73	65.75	66.18
177.0	66.81	66.55	66.31	66.24	66.48	66.42	66.14	66.16	66.15	66.32
180.0	66.96	66.77	66.89	66.73	66.81	67.02	66.76	66.50	66.36	66.45
G/C	300.0	315.0	330.0	345.0						
0.0	13492	13518	13515	13559						
3.0	13765	14002	14186	14316						
6.0	13397	13833	14225	14415						
9.0	12457	13020	13533	13805						
12.0	11190	11750	12289	12558						
15.0	9836	10320	10803	11017						
18.0	8670	9018	9358	9511						
21.0	7611	7895	8152	8254						
24.0	6580	6831	7065	7148						
27.0	5605	5801	6008	6095						
30.0	4738	4906	5062	5121						
33.0	4087	4189	4290	4329						
36.0	3582	3639	3699	3724						
39.0	3168	3197	3230	3241						
42.0	2825	2841	2854	2860						
45.0	2555	2554	2559	2555						
48.0	2336	2327	2324	2320						
51.0	2158	2146	2141	2141						
54.0	2036	2041	2045	2055						
57.0	1835	1845	1876	1879						
60.0	1483	1499	1534	1536						
63.0	1159	1171	1191	1193						
66.0	934.8	935.2	940.8	943.4						

**C Range: 0 - 360DEG**

**C Interval: 15.0DEG**

**Test Speed: HIGH**

**Temperature: 25.3DEG**

**Operators: LUC**

**Test Date: 03 January 2018**

**γ Range: 0 - 180DEG**

**γ Interval: 1.0DEG**

**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**

**Humidity: 65.0%**

**Test Distance: 8.000m [K=1.0000]**

**Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1**

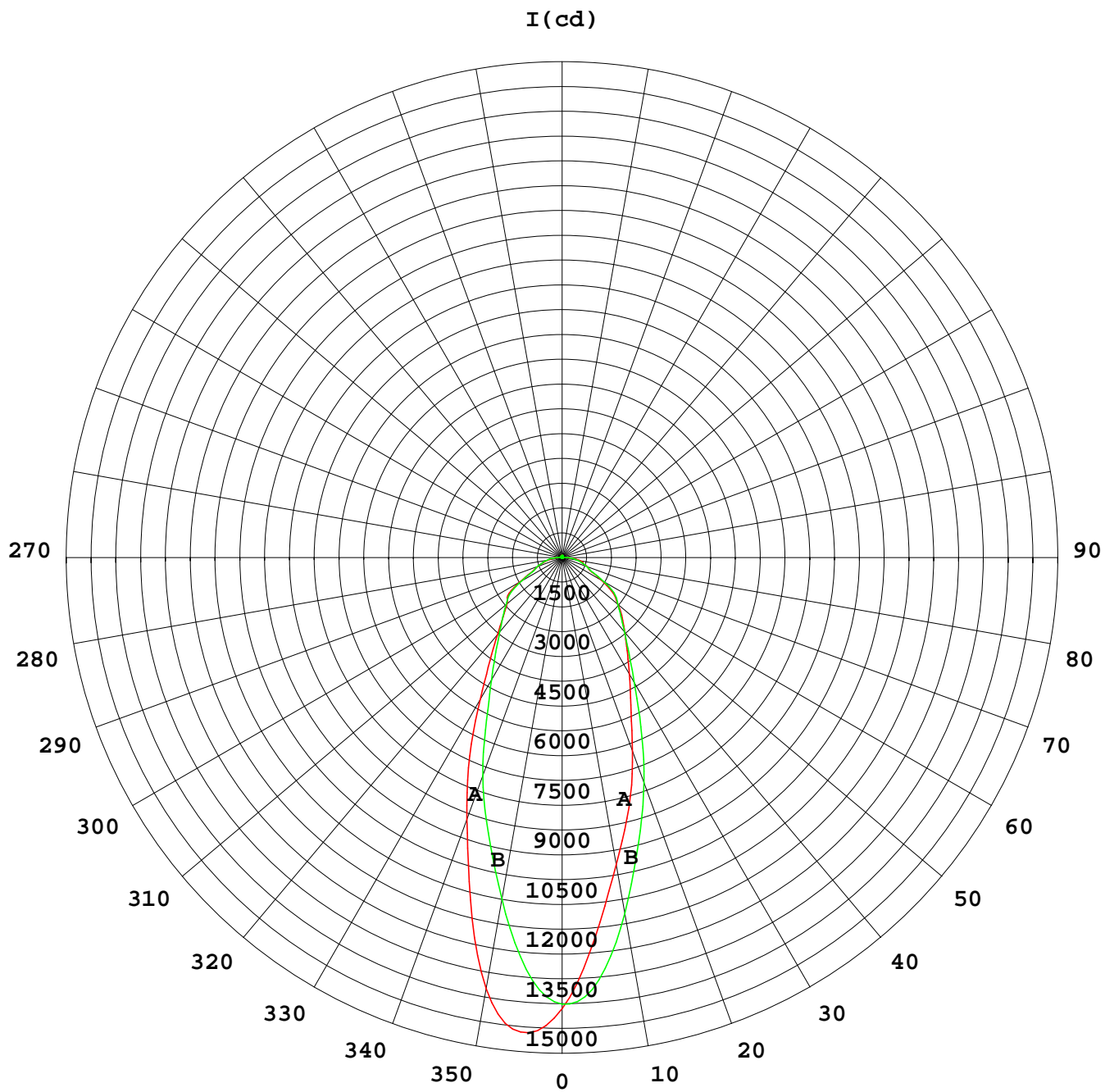


**Photometric Data Table [cd]**

69.0	839.1	832.4	831.0	825.9
72.0	737.4	734.3	732.0	729.0
75.0	609.4	603.3	603.9	597.0
78.0	516.0	508.3	492.3	488.6
81.0	402.2	393.1	383.0	377.4
84.0	321.0	310.4	296.7	290.9
87.0	198.2	194.7	201.6	186.3
90.0	75.77	57.61	65.83	62.50
93.0	26.49	15.14	13.75	14.71
96.0	14.13	14.40	15.83	16.96
99.0	15.11	15.33	15.65	16.28
102.0	16.61	16.52	16.71	16.61
105.0	18.30	18.84	18.60	18.04
108.0	20.88	20.88	20.22	19.50
111.0	23.88	22.66	21.47	21.11
114.0	26.18	24.50	23.08	22.91
117.0	28.09	26.87	25.07	24.97
120.0	30.47	29.23	27.09	27.26
123.0	33.08	31.38	29.72	29.82
126.0	36.16	33.89	32.62	32.55
129.0	38.86	36.51	35.28	35.59
132.0	41.23	39.69	38.91	38.85
135.0	43.88	43.03	42.89	42.34
138.0	46.97	46.63	46.34	45.83
141.0	50.12	49.76	49.74	49.70
144.0	53.15	53.06	52.96	53.25
147.0	56.15	56.21	55.75	56.15
150.0	59.06	58.77	58.29	58.68
153.0	61.14	60.81	60.49	60.76
156.0	62.86	62.45	62.28	62.54
159.0	64.07	64.00	63.83	63.89
162.0	65.10	65.09	65.01	65.15
165.0	65.71	65.84	65.90	66.09
168.0	66.08	66.14	66.30	66.57
171.0	66.31	66.32	66.37	66.67
174.0	66.48	66.54	66.48	66.63
177.0	66.76	66.92	66.72	66.90
180.0	66.73	67.09	66.92	66.80

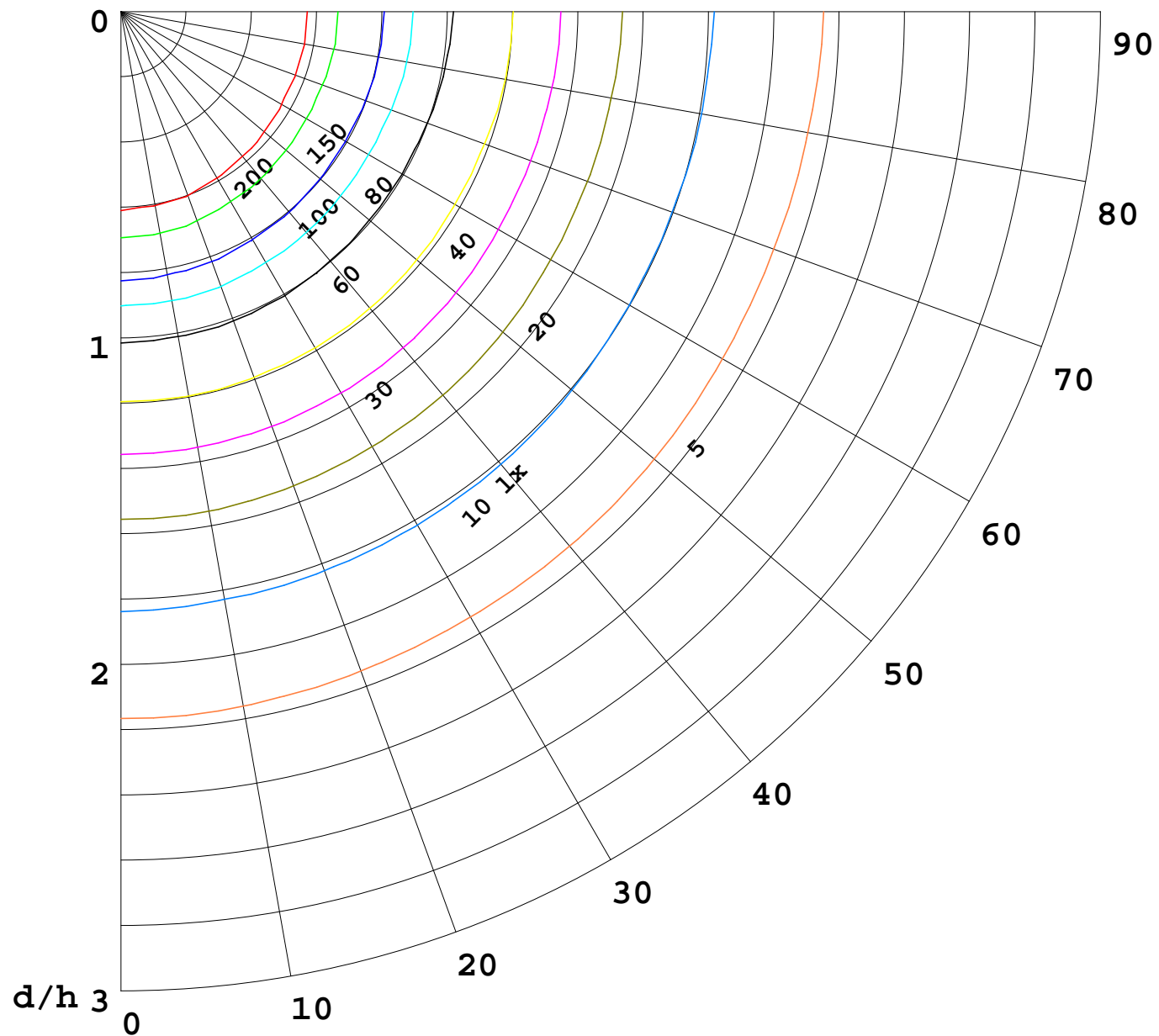
**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: LUC**  
**Test Date: 03 January 2018**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-G5 288EA-45D\_180927#1**



1000 lm

$K = 1$



**$F$**      = 1000 lm  
 **$K$**      = 0.7  
 **$H_{cc}$**   = 0.8 m  
 **$H_{fc}$**   = 0.0 m  
 **$E_{ave}$**  = 100 lx

	<b><math>P_{cc}</math></b>	<b><math>P_w</math></b>	<b><math>P_{fc}</math></b>
—————	70	50	30
—————	50	30	20

